NRC INSPECTION MANUAL

PART 9900: 10 CFR GUIDANCE

50_109.CFR

10 CFR 50.109
BACKFITTING

A. PURPOSE

The purpose of 10 CFR 50.109 is to establish specific regulatory authority for effecting the addition, elimination or modification of structures, systems or components at the facility after the construction permit has been issued (including operating plants). IE guidance for recommending plant modifications is herein set forth.

B. DISCUSSION

Backfitting as related to 50.109 pertains only to the hardware related aspects of structures, systems and components. It does not impact on regulatory authority to effect changes in administrative controls such as procedures, staffing, training, records and reporting. In order to impose backfitting requirements on licensees, the Commission must make a finding that such action will effect substantial, additional protection for the public health and safety or the common defense and security.

The Office of Nuclear Reactor Regulation (NRR) has requested that the Office of Inspection and Enforcement evaluate any IE proposed backfit recommendation against the criteria of 10 CFR 50.109 prior to submittal to NRR for action. This guidance should not discourage the Regions from evaluating inspection results at older facilities against current criteria and making recommendations for improvement in license requirements when appropriate. It should be recognized, however, that other than administrative functions, such recommendations must meet the Backfitting Requirements of 10 CFR 50.109.

The following steps will be employed by IE prior to submitting a recommendation for plant modification to NRR.

1. IE Review/Evaluation Responsibility

   a. The Regional Office recommending a backfit item is responsible for making a preliminary evaluation showing that the recommendation will effect substantial addi-

tional protection for the public health and safety or the common defense and security.

Recommendations which do not meet this requirement should not be forwarded to Headquarters for action.

b. The Division of Resident & Regional Reactor Inspection (RRRI) and Division of Safeguards & Radiological Safety Inspection (SRSI) are responsible for evaluating all matters which are forwarded from the Regions which may be classified as being in the potential Backfit Category. If this evaluation does not indicate that the potential for substantial additional protection is present, the recommendation will not be submitted to NRR.

2. Criteria for Determining Whether Substantial Additional Protection is Effected. Although not every eventuality can be foreseen, the following considerations should be included in the evaluation:

   a. Does the Implementation Section of a Regulatory Guide reflect the NRC position that the modification is appropriate to the facility?

   b. Does the SAR indicate that the affected structure, system or component is designed to prevent an accident or mitigate the consequences of an accident?

   c. Can administrative controls effect the same or similar results as the modification?

   d. Is the single failure criteria of the functional system negated without the modification?

   e. Has a problem occurred previously or is the situation classified as a potential problem?

   f. Is this one of several redundant components or systems designed to perform essentially the same function?

   In those cases in which the Regions have questions regarding the appropriateness of a recommendation, they should contact the Division of Resident & Regional Reactor Inspection or Division of Safeguards & Radiological Safety Inspection for assistance.

Backfitting - Standard Technical Specifications, Regulatory Guides and Branch Technical Positions

1. Standard Technical Specifications (STS). A great many items in the older plant technical specifications do not conform to the STS. This will probably continue to be the case, since the STS are continually changing as new systems evolve and areas of emphasis on safety change. Also, the current NRC emphasis on incorporating safety requirements in the Rules and Regulations may reduce the future need for technical specification detail in some areas. For these reasons, the NRR staff time that would be necessary for backfitting STS requirements to all licensees is not warranted, unless a specific problem has been identified in the licensees operation. While the technical specifications for some plants have been upgraded

to include many of the newer STS requirements, it has been a long standing NRR policy to not require any plant to backfit in total to the STS. If items of importance to safety arise, they are considered on a case-by-case basis.

2. Regulatory Guides. Regulatory Guides are used as a mechanism to identify and promulgate to the industry and the public acceptable solutions to safety issues. They may endorse efforts by the industry through the national standards program to codify good practice and assure wide use of good engineering.

   In order to minimize possible misunderstanding relating to the status and purpose of regulatory guides, the Commission established a policy that such guides generally be forward looking documents aimed at the stabilization of practice or clarification of general language in Commission regulations. To accomplish this goal, the Regulatory Guide format was modified in 1974 to include an implementation section which may state that the staff will use the related NRC position as the basis for review of all applications docketed after a specific date subsequent to issuance of the guide. NRC has also stated that only in rare cases where truly essential matters are involved and licensees do not see fit to propose a change will backfitting be considered and then based only on careful case-by-case reviews and in accordance with the requirements of 10 CFR 50.109.

   The applicability to operating facilities of new guides or revisions to existing Regulatory Guides will be identified in the implementing section of appropriate guides or in a formal communication to specific licensee(s) requesting that a commitment be made to reflect the action identified in the Regulatory Guide. Again this action will be based on a case-by-case review.

3. Branch Technical Position. Branch technical positions are a device used by technical review groups within NRC to standardize the licensing review in the absence of Regulatory Guides in particular areas. These positions represent the current or intended licensing practice and as such, may be used in the review of active applications. As with Regulatory Guides, only in rare cases where essential matters are involved will the positions be applied to plants already reviewed. They will be backfitted only in accordance with 10 CFR 50.109.

4. Enforceability-Regulatory Guide/Branch Technical Positions. The Commission has stated that Regulatory Guides and branch technical positions are not intended as substitutes for regulations. Therefore, compliance with these documents is not required.

C. REFERENCES

1. The subject of Standard Technical Specifications was discussed in a memorandum, E.L. Jordan to R.L. Lewis, dated April 17, 1981.

2. The subject of Regulatory Guides and Branch Technical Positions was discussed in a letter, R.B. Minogue to Mr. J.D. Geier, Supervisor of Quality Assurance, Illinois Power Company, dated July 8, 1975.

3. Speech by V. Stello to the Atomic Industrial Forum's Annual Work Shop on Reactor Licensing and Safety, Miami Beach, Florida, February 6-9, 1977.

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